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EFFECTS OF SIZE OF FRUIT ON PRICE OF FLORIDA ORANGES, NEW YORK AND ST. LOUIS AUCTION MARKETS, 1949-50 SEASON

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2 U.S. Bureau of Agricultural Economics
UNITED STATES DEPARTMENT OF AGRICULTURE

5a Washington, D. C.   October 1951

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SUMMARY

The study upon which this report is based sought to establish relationships between size of Florida oranges and selling price at auction and retail levels and to measure the margins associated with the various services performed as the fruit moved through the marketing channels. The report covers the New York and St. Louis markets during the period November through June of the 1949-50 season. Prices at auction and retail levels were recorded on Monday, Tuesday, and Wednesday of the week of the 15th of each month. Four sizes of Florida oranges were used representing the bulk of the shipments to the two auctions studied.

At the auction level, time of season, market location, and size of fruit each influenced significantly the selling price of Florida oranges. Prices began at $3.36 per box in November, reached a peak of $5.81 per box in March, and dropped off to $5.10 in June. This seasonal pattern was nearly alike in the New York and St. Louis auction markets. Prices ranged from $0.06 to $1.32 per box more in New York than in St. Louis, averaging $0.42 or 9 percent higher for the season. Size of fruit had a definite effect on auction price in both cities. Size 200 fruit sold at a premium of 2.9 percent over the two-city average price for all sizes and was followed by size 216 at 1.9 percent over the average. Size 176 sold at a discount of 0.2 percent and size 150 at a discount of 4.6 percent.

At the retail level, differences in price were significant only between cities. The retail price averaged $8.40 per box in New York compared to $7.10 in St. Louis.

The wholesale-retail margin was 41 percent of the consumer's dollar for Florida oranges sold in New York and 36 percent for those sold in St. Louis. The auction margin was 2 percent in both cities. Freight and associated charges totaled 14 percent of the retail price in New York and 18 percent in St. Louis. Picking, handling, and packing charges which were assumed to be the same for fruit shipped to either market, amounted to 15 percent of the retail price in New York and 17 percent in St. Louis. The return to producers was 28 percent of the retail price for fruit sold in New York and 27 percent for fruit sold in St. Louis. Because of the different retail price levels, however, the "on-tree" return was $2.36 per box for oranges sold in New York and $1.89 per box for oranges sold in St. Louis.

1/ This study is part of the continuing work in costs and margins being conducted under provisions of the Research and Marketing Act of 1946 as a basis for increased efficiency and lower costs in marketing farm products. Related work has been done at grower, wholesale, and retail levels by the Department and at State experiment stations.

INTRODUCTION

As oranges move from the producer through the marketing channels to the ultimate consumer, the assembling, shipping to terminal markets, and distribution to retail outlets require that many services be performed. Costs of marketing affect retail prices and bear directly on returns to producers. An efficient performance of these services designed to meet consumer requirements is in the best interests of both producers and marketing agencies.

Terminal market sales are made in large lots through various brokers and commission dealers who may either make private sales or sell on the public auction. Retail sales are practically all made through established grocery or specialty stores, where the oranges are sold by the pound or dozen or occasionally in pre-packaged net bags.

This study seeks (1) to establish relationships between size of fruit and selling price at the auction market and retail stores and (2) to measure the margins associated with the various services performed by each handler from producer to consumer in two important markets.

DESCRIPTION OF DATA

Data included auction and retail prices for the middle of the month for Florida oranges sold in New York City and St. Louis during the 1949-50 season. New York was chosen to represent a large market and St. Louis a medium-sized one. Both are important sales outlets for Florida oranges and a substantial proportion of the fruit is sold through the auction market in each city.

Retail prices upon which this analysis is based were obtained through the cooperation of the United States Bureau of Labor Statistics. Prices were reported each month during Monday, Tuesday, and Wednesday of the week of the 15th for each size of fruit on sale during this period at each of the BLS sample stores in the city. These prices were converted from price per pound or dozen to price per box to facilitate comparison with auction prices. Four sizes, which represented the bulk of the fruit sold during the 1949-50 season, were included. They were sizes 150, 176, 200, and 216, measured by number of fruit per box.

Auction prices for the four sizes were obtained directly from the fruit auction companies in the two cities. Each lot of these sizes sold during the 3-day period that corresponded to the retail pricing period was included. The period studies covered 8 months of the 1949-50 season, November 1949 through June 1950.

The days on which prices were recorded were chosen on the basis of data available. Three days in the middle of the month are used by the Bureau of Labor Statistics in gathering data on regular retail prices of food. The largest part of the auction business is conducted early in the week--Monday often accounts for the largest volume of any day. Therefore, auction prices for these 3 days are quite representative. Although the end of the week retail prices in general may be a little lower because of "specials," this should affect relationships between sizes sold very little.

PRICE ANALYSIS

The auction and retail prices used in this analysis were gathered to meet the requirements of three particular comparisons. Price comparisons were made between cities (New York and St. Louis); among sizes (150, 176, 200, and 216); and among time periods (months of the season).

The effect of market location, size of fruit, and time of season on the selling price of Florida oranges at auction and retail levels were tested statistically. 2/ When casual relationships were indicated further comparisons were made.

Auction.--At the auction level, time periods, differences in location of markets, and size of fruit significantly affected price, and a definite seasonal pattern was evident. Prices were low early in the season, falling in December to $3.33 per box; they reached a peak in March of $5.81, and dropped off at the end of the season to $5.10 per box in June. The peak in prices at auction coincided with the height of the packing season in Florida, when both concentrators and fresh fruit packers compete for the better quality and varieties of fruit available.

Auction prices in the two cities showed a definite difference. Those in New York ranged from $0.06 to $1.32 per box higher than in St. Louis, and averaged $0.42 per box higher for the season. This represents a price level 9 percent higher on the New York auction. Reports for the 1949-50 season show that, in New York, 1,987 cars of Indian River oranges were received. This was about 37 percent of the total 1949-50 unloads of Florida oranges in New York. During the same period no unloads of Indian River fruit were recorded for St. Louis. 3/ At the same time, 367 cars of Temple oranges were received in New York and 4 cars in St. Louis. Temple oranges, however, have been excluded from the data used in this analysis as they are available only in small quantities and are generally priced higher than the other varieties.

Size of fruit affected the auction price of oranges in both cities. An index of price variability by size is given in table 1 as plus or minus percentage deviations from the average for all sizes. Volumes of each size as a percentage of the total are also given for each month. Examination of the table reveals that size 200 fruit sold at a premium during 7 of the 8 months observed in New York and 6 of the 8 months in St. Louis. Size 216 oranges enjoyed a similar price premium, although it was not so great. Size 176 fluctuated closely around the average and size 150 fruit sold at a definite discount

2/ Appendix A.

3/ Information concerning market unloads and prices was taken from Marketing Florida Citrus, Summary of 1949-50 Season, by H. F. Willson, United States Production and Marketing Administration, Market News Service on Fruits and Vegetables and Florida State Marketing Bureau Cooperating.

Table 1.--Variability of purchase volume and price per box of Florida oranges sold on the New York and St. Louis auction markets, by size, November 1949--June 1950 1/

New York

Date	Percentage of total volume 2/				Average price all sizes	Percentage deviation from average price			
	Size 150	Size 176	Size 200	Size 216		Size 150	Size 176	Size 200	Size 216
	Percent	Percent	Percent	Percent	Dollars	Percent	Percent	Percent	Percent
1949									
November	8	22	23	47	3.39	+ 6.8	0.0	- 0.3	- 6.5
December	9	24	25	42	3.46	+ 7.5	+ 2.9	+ .9	-10.7
1950									
January	13	29	24	34	4.82	- 4.4	- 0.4	+ 3.3	+ 1.9
February	17	27	22	34	5.67	- 6.9	+ 1.8	+ 4.1	+ 1.2
March	19	31	22	28	5.97	- 8.4	- 2.2	+ 5.2	+ 5.4
April	17	31	24	28	5.43	- 3.1	- 0.9	+ 3.1	+ 1.1
May	21	31	22	26	5.26	- 3.6	+ .8	+ 2.7	.0
June	21	33	23	23	5.76	- 7.3	+ .2	+ 4.7	+ 2.4
Season average	15.6	28.5	23.1	32.8	4.97	- 3.4	+ 0.2	+ 3.2	+ 0.2

St. Louis

Date	Size 150	Size 176	Size 200	Size 216	Average price all sizes	Size 150	Size 176	Size 200	Size 216
1949									
November	5	19	13	63	3.33	+ 1.8	+ 1.2	- .9	- 2.4
December	5	20	24	51	3.20	+ 5.6	+ .3	- .6	- 5.9
1950									
January	9	16	36	39	4.21	- 6.2	.0	+ .5	+ 5.9
February	10	22	23	45	5.60	- 5.0	+ .2	+ 3.4	+ 1.1
March	12	36	23	29	5.64	- 3.9	- 1.2	+ 2.3	+ 3.2
April	18	22	28	32	4.81	- 4.8	- .8	+ 1.7	+ 4.0
May	28	31	23	18	5.18	-11.6	- 5.4	+ 7.7	+ 9.5
June	28	27	22	23	4.44	-17.8	+ 2.7	+ 5.9	+ 9.2
Season average	14.4	24.1	24.0	37.5	4.55	- 5.9	- .7	+ 2.9	+ 3.7
Season average for both cities	15.0	26.3	23.6	35.2	4.76	- 4.6	- .2	+ 2.9	+ 1.9

1/ Based on all sales made during Monday, Tuesday, and Wednesday of the week (Sunday through Saturday) of the 15th of each month.

2/ Total volume refers only to the four sizes listed. The relatively insignificant volume of sizes other than those sold during this period are not included.

except in the early part of the season. This price pattern was consistent for all except the first 2 months of the season. The high prices obtained for the larger fruit at that time were probably due partly to the small quantity of those sizes available. On the basis of this study, only about half the average monthly volume of size 150 fruit was available in November and December of the 1949-50 season. The average premiums and discounts for both cities were: size 150, -4.6; size 176, -0.2; size 200, +2.9; and size 216, +1.9 percent (figure 1).

A coefficient of variation was determined for each size of fruit to compare the seasonal variation in prices. This measure of variability is an expression of the standard deviation as a percentage of the arithmetic mean. Chiefly because of low prices early in the season a good deal of variation occurred in seasonal prices for all sizes. In New York, the coefficient of variation ranged from 14.0 percent for size 150 oranges to 22.9 percent for size 216. In St. Louis, prices varied less among sizes ranging from 17.9 percent for size 176 to 21.0 percent for sizes 200 and 216 fruit. No important difference in the seasonal variability of prices for any particular size is apparent from these observations.

Table 2.--Coefficient of variation in auction prices
of Florida oranges sold on the New York and
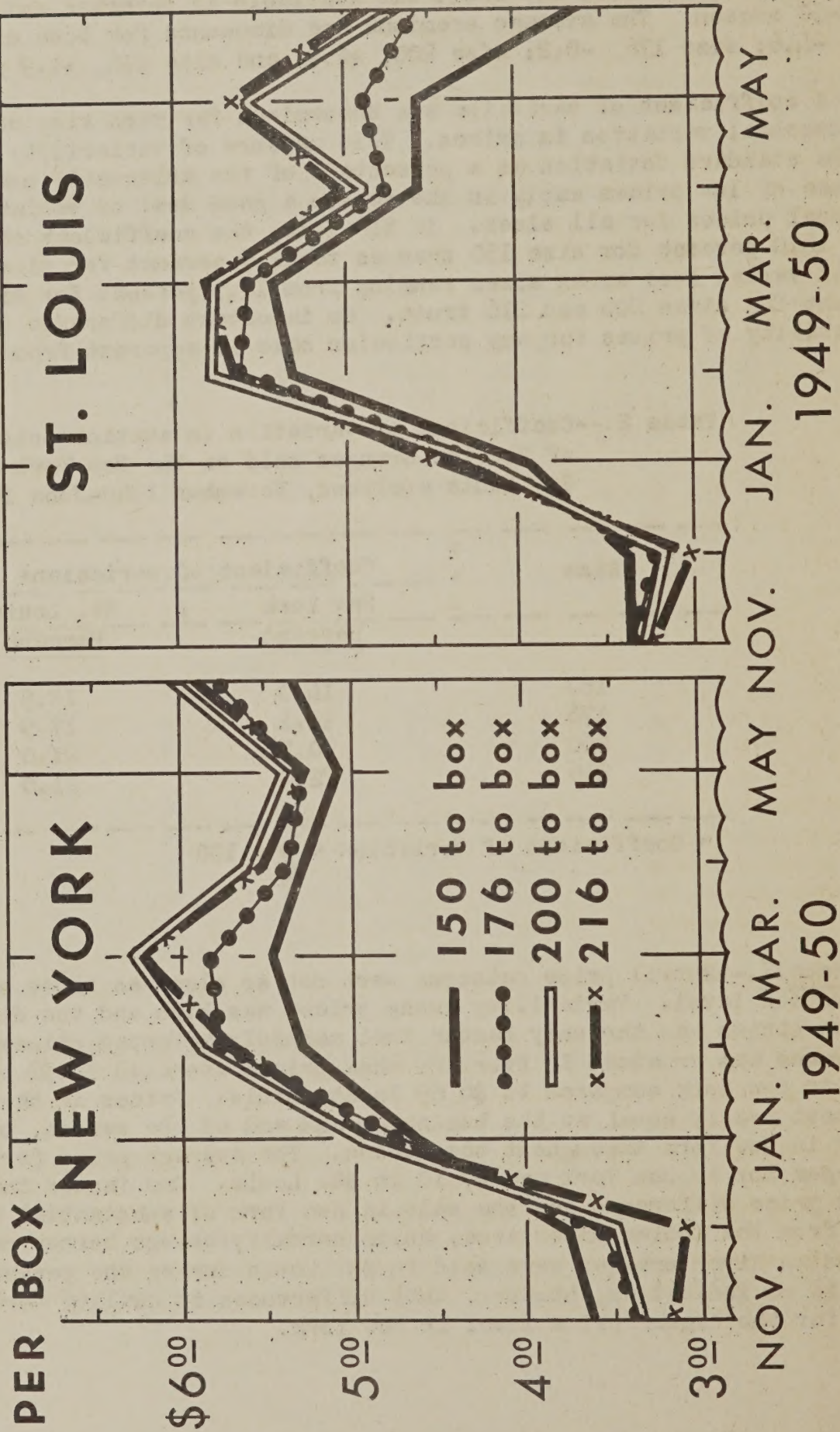St. Louis auctions, November 1949-June 1950

Size	Coefficient of variation*	
	New York	St. Louis
	Percent	Percent
150	14.0	18.5
176	18.1	17.9
200	20.7	21.0
216	22.9	21.0

* Coefficient of variation = $\dfrac{\sigma}{M} \times 100$

Retail.--Retail price patterns were not so clear as those observed at the auction level. Variability among prices was high and the difference between cities was the only factor that markedly affected prices. The difference was greatest in February when prices averaged $9.92 per box for all sizes in New York compared to $6.69 in St. Louis. Prices in the two cities were most nearly equal at the beginning and end of the season, but they remained higher in New York throughout the season. The average price for the season was $8.40 per box in New York and $7.10 in St. Louis. One factor that contributed to the price difference was the sale in New York of substantial quantities of fruit from the Indian River area, which normally brings better prices. Very few Indian River oranges were sold in St. Louis during the period of this study. There is no indication, however, that differences in quality were solely responsible for the higher price level in New York.

AUCTION PRICES OF ORANGES

Florida Oranges Sold in New York and St. Louis

PER BOX

NEW YORK
1949-50

NOV.   JAN.   MAR.   MAY

- —— 150 to box
- •••• 176 to box
- ▭ 200 to box
- x—x 216 to box

ST. LOUIS
1949-50

MAY   NOV.   JAN.   MAR.   MAY

$6.00

$5.00

$4.00

$3.00

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FIGURE I

It could not be ascertained whether size of fruit measurably affected the retail price of Florida oranges during the 1949-50 season, nor could a seasonal price pattern be clearly established. The retail sample was small and it did not provide a broad enough base for adequate statistical testing of these relationships. Since size of fruit very definitely influenced the price of Florida oranges sold at auction in these cities, this may also be true at retail. However, there is a possibility that retail prices do not truly reflect differences in size of fruit. More detailed analysis of this problem would be helpful in attempting to ascertain the extent of this relationship.

MARGINS AND RETURN TO SHIPPERS

No attempt was made to test statistically the effect of size of fruit on wholesale-retail margins as such differences were not apparent at the retail level. The margins for all sizes were higher in New York than in St. Louis during each month except June. The average wholesale-retail margins for the season were $3.43 in New York and $2.55 in St. Louis. When expressed as a percentage of the retail purchase price the average margins for the 8-month period were 41 percent in New York and 36 percent in St. Louis. The wholesale-retail margin includes a small charge to the auction company for warehousing and handling the fruit. This amounts to $0.07 per box in New York and $0.05 per box in St. Louis. Also included are the charges for distribution to retail stores and the charges made for handling, displaying, and selling in the retail stores.

Auction companies make a selling charge which is a percentage of the auction selling price. The charge for selling Florida oranges is 1 3/4 percent in New York, and 2 percent in St. Louis. During the period of the study, this charge varied from $0.06 to $0.11 per box in New York and $0.07 to $0.12 in St. Louis. In New York, the auction company makes an additional sorting and display charge of about $0.02 per box. No comparable charge is made in St. Louis. In addition to the auction charge, some expense is incurred by the shipper's representative at the auction who handles the sales transaction. He places the fruit on the auction for sale and accepts the offered price or withdraws the fruit for sale at a later date if the price seems unfavorable. This charge depends upon individual arrangements and may vary among different shippers. There is, however, a degree of competition among brokers which tends to keep it fairly uniform. On the basis of available information, a charge of $0.06 per box has been assigned in both cities to cover the cost of this service.

Freight charges were based on the rates from Lake Wales, Fla., to New York and St. Louis. Lake Wales was used as the point of origin because it is centrally located in the citrus-producing area and is, therefore, considered representative of that area. The basic rate from Lake Wales is $0.98 per box to New York and $1.08 to St. Louis. "Standard refrigeration" is used for a large part of the rail shipments of Florida oranges. This protective service charge is $0.13 per box to New York and $0.18 per box to St. Louis. 4/ In

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4/ Freight and protective services rates were secured from the Production and Marketing Administration, Transportation and Warehousing Branch. Standard refrigeration charges per box are based on an average car of 490 boxes.

New York, the auction is located on a railroad pier and fruit must cross the
river on a barge. This results in an unloading charge in addition to the
basic freight rate of a little more than $0.08 per box, which is included in
the freight bill. No similar charge is made in St. Louis. In addition to
the above components, a Federal tax of 3 percent on the total freight bill was
included in the margin for transportation.

Packing charges included car-loading and selling expenses as well as all
the costs incident to preparing and packing the fruit. 5/ Picking and hauling
charges cover the cost of getting the fruit from the tree to the packinghouse.

By subtracting the charges made for the services performed at each stage
in the marketing channel from the auction price, an approximate "on-tree"
price was obtained. This, of course, is not a true on-tree price but a residual
obtained by subtracting the usual marketing charges from the auction price. It
indicates how changes in prices at the auction level affect the returns to pro-
ducers.

Differences in on-tree returns for oranges sold in the two cities are indi-
cated by these data. As returns to shippers for comparable fruit are assumed
to average about the same in different markets over a season, this difference
in on-tree returns might be attributed to differences in quality and pack.
New York is an important market for Florida oranges of the highest quality.
Reports of the Market News Service indicated that a large part of this differ-
ence may be attributed to heavy shipments of fancy quality fruit to New York.
Fruit from the Indian River area, which generally commands a premium price,
was shipped in substantial quantities to New York. On the basis of available
unload data, no Indian River fruit was shipped to the St. Louis market. This
indicates that a much larger proportion of better quality fruit is sold in
New York than in St. Louis. The effect of shipments from competing producing
areas on prices at terminal markets is beyond the scope of this discussion but
probably is not as important as differences in quality and pack in this case.

5/ Charges for packing and for picking and hauling were obtained from
reports of the Farm Credit Administration's Cooperative Research and Service
Division and the Florida and Texas Agricultural Experiment Stations.

APPENDIX A

Table 3.--Analysis of variance of prices of Florida oranges at auction
and retail levels, November 1949-June 1950

Auction			
Variance	Sum of squares	Degrees of freedom	Mean square
Between cities	2.8308	1	2.831*
Among sizes	1.2422	3	.414*
Among time periods (months)	51.0799	7	7.297*
Interaction of cities and sizes	.1369	3	.046
Interaction of cities and time periods	2.5674	7	.367*
Interaction of sizes and time periods	1.9642	21	.091*
Residual	.4290	21	.020
Total	60.1905	63	
Retail			
Between cities	27.2223	1	27.222*
Among sizes	6.4074	3	2.136
Among time periods	43.3615	7	6.195
Interaction of cities and sizes	1.4898	3	.497*
Interaction of cities and time periods	13.2616	7	1.895*
Interaction of sizes and time periods	7.2903	21	.347
Residual	9.4635	21	.451
Total	108.4964	63	

*Values of this magnitude would occur 5 times or less in 100 purely as a
result of chance variation.

Analysis of variance was used to test for the existence of relationships
among given characteristics and the price of Florida oranges at auction and
retail levels. This technique was employed to learn whether a significant dif-
ference existed in the price paid for Florida oranges: Between cities (New
York and St. Louis), among sizes, and among time periods (months of the season).
Results of the test indicated that there was a significant difference in both
auction and retail prices paid for Florida oranges between New York and St.
Louis. Furthermore, at the auction level, this test revealed that a difference
in prices paid by wholesalers existed among sizes and time periods. At the
retail level, prices were not significantly affected by differences in size
nor was a seasonal pattern evident.

APPENDIX B

Table 4.—Grove-to-retail margins per box for Florida oranges sold in New York and
St. Louis, by size and by months, November 1949–June 1950

New York

Month	Size	Retail price	Wholesale retail margin	Auction price	Selling charges	Freight charges	F.o.b. packinghouse price	Packing charges	Picking & hauling charges	On-tree price
		Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars
1949 Nov.	150	6.09	2.47	3.62	.14	1.23	2.25	.91	.30	1.04
	176	7.20	3.81	3.39	.14	1.23	2.02	.91	.30	.81
	200	6.64	3.26	3.38	.14	1.23	2.01	.91	.30	.80
	216	6.79	3.62	3.17	.14	1.23	1.80	.91	.30	.59
	All	6.68	3.29	3.39	.14	1.23	2.02	.91	.30	.81
Dec.	150	6.41	2.69	3.72	.15	1.23	2.34	.91	.30	1.13
	176	7.81	4.25	3.56	.14	1.23	2.19	.91	.30	.98
	200	7.50	4.01	3.49	.14	1.23	2.12	.91	.30	.91
	216	6.53	3.44	3.09	.13	1.23	1.73	.91	.30	.52
	All	7.06	3.60	3.46	.14	1.23	2.09	.91	.30	.88
1950 Jan.	150	8.61	4.00	4.61	.16	1.23	3.22	.91	.30	2.01
	176	8.55	3.75	4.80	.16	1.23	3.41	.91	.30	2.20
	200	8.09	3.11	4.98	.17	1.23	3.58	.91	.30	2.37
	216	8.20	3.29	4.91	.17	1.23	3.51	.91	.30	2.30
	All	8.36	3.54	4.82	.17	1.23	3.42	.91	.30	2.21
Feb.	150	9.96	4.68	5.28	.17	1.23	3.88	.91	.30	2.67
	176	10.13	4.36	5.77	.18	1.23	4.36	.91	.30	3.15
	200	10.08	4.18	5.90	.18	1.23	4.49	.91	.30	3.28
	216	9.49	3.75	5.74	.18	1.23	4.33	.91	.30	3.12
	All	9.92	4.24	5.67	.18	1.23	4.26	.91	.30	3.05

Continued

Table 4.—Grove-to-retail margins per box for Florida oranges sold in New York and St. Louis, by size and by months, November 1949–June 1950—Continued

Month	Size	Retail price	Wholesale: retail: margin	Auction price	New York		F.o.b. :packinghouse: price	Packing charges	Picking & hauling charges	On-tree price
					Selling charges	Freight charges				
		Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars
1950										
March	150	10.35	4.88	5.47	.18	1.23	4.06	.91	.30	2.85
	176	9.57	3.73	5.84	.18	1.23	4.43	.91	.30	3.22
	200	9.63	3.35	6.28	.19	1.23	4.86	.91	.30	3.65
	216	9.08	2.79	6.29	.19	1.23	4.87	.91	.30	3.56
	All	9.66	3.69	5.97	.19	1.23	4.55	.91	.30	3.34
April	150	8.18	2.92	5.26	.17	1.23	3.86	.91	.30	2.65
	176	9.79	4.41	5.38	.17	1.23	3.98	.91	.30	2.77
	200	9.50	3.90	5.60	.18	1.23	4.19	.91	.30	2.98
	216	9.36	3.87	5.49	.18	1.23	4.08	.91	.30	2.87
	All	9.21	3.78	5.43	.18	1.23	4.02	.91	.30	2.81
May	150	8.21	3.14	5.07	.17	1.23	3.67	.91	.30	2.46
	176	8.66	3.36	5.30	.17	1.23	3.90	.91	.30	2.69
	200	8.55	3.15	5.40	.17	1.23	4.00	.91	.30	2.79
	216	8.94	3.68	5.26	.17	1.23	3.86	.91	.30	2.65
	All	8.59	3.33	5.26	.17	1.23	3.86	.91	.30	2.65
June	150	7.06	1.72	5.34	.17	1.23	3.94	.91	.30	2.73
	176	7.18	1.41	5.77	.18	1.23	4.36	.91	.30	3.15
	200	7.80	1.77	6.03	.19	1.23	4.61	.91	.30	3.40
	216	8.92	3.02	5.90	.19	1.23	4.48	.91	.30	3.27
	All	7.74	1.98	5.76	.18	1.23	4.35	.91	.30	3.14

Continued

Table 4.—Grove-to-retail margins per box for Florida oranges sold in New York and
St. Louis, by size and by months, November 1949—June 1950—Continued

St. Louis

Month	Size	Retail price	Wholesale: retail margin	Auction price	Selling charges	Freight charges	F.o.b. packinghouse price	Packing charges	Picking & hauling charges	On-tree price
		Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars
1949 Nov.	150	5.98	2.59	3.39	.13	1.30	1.96	.91	.30	.75
	176	6.98	3.61	3.37	.13	1.30	1.94	.91	.30	.73
	200	7.83	4.53	3.30	.13	1.30	1.87	.91	.30	.66
	216	5.74	2.49	3.25	.13	1.30	1.82	.91	.30	.61
	All	6.63	3.30	3.33	.13	1.30	1.90	.91	.30	.69
Dec.	150	5.38	2.00	3.38	.13	1.30	1.95	.91	.30	.74
	176	6.18	2.97	3.21	.12	1.30	1.79	.91	.30	.58
	200	5.91	2.73	3.18	.12	1.30	1.76	.91	.30	.55
	216	6.07	3.06	3.01	.12	1.30	1.59	.91	.30	.38
	All	5.89	2.69	3.20	.12	1.30	1.78	.91	.30	.57
1950 Jan.	150	5.75	1.80	3.95	.14	1.30	2.51	.91	.30	1.30
	176	7.00	2.79	4.21	.14	1.30	2.77	.91	.30	1.56
	200	6.98	2.75	4.23	.14	1.30	2.79	.91	.30	1.58
	216	6.66	2.20	4.46	.15	1.30	3.01	.91	.30	1.80
	All	6.60	2.39	4.21	.14	1.30	2.77	.91	.30	1.56
Feb.	150	3.96	-1.36	5.32	.17	1.30	3.85	.91	.30	2.64
	176	7.56	1.95	5.61	.17	1.30	4.14	.91	.30	2.93
	200	7.87	2.08	5.79	.18	1.30	4.31	.91	.30	3.10
	216	7.38	1.72	5.66	.17	1.30	4.19	.91	.30	2.98
	All	6.69	1.10	5.60	.17	1.30	4.13	.91	.30	2.92

Continued

Table 4.—Grove-to-retail margins per box for Florida oranges sold in New York and St. Louis, by size and by months, November 1949-June 1950—Continued

St. Louis

Month	Size	Retail price	Wholesale-retail margin	Auction price	Selling charges	Freight charges	F.o.b. packinghouse price	Packing charges	Picking & hauling charges	On-tree price
		Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars
1950 March	150	8.44	3.02	5.42	.17	1.30	3.95	.91	.30	2.74
	176	8.02	2.45	5.57	.17	1.30	4.10	.91	.30	2.89
	200	7.89	2.12	5.77	.18	1.30	4.29	.91	.30	3.06
	216	9.05	3.23	5.82	.18	1.30	4.34	.91	.30	3.13
	All	8.34	2.70	5.64	.18	.130	4.16	.91	.30	2.95
April	150	7.20	2.62	4.58	.15	1.30	3.13	.91	.30	1.92
	176	8.01	3.24	4.77	.16	1.30	3.31	.91	.30	2.10
	200	8.24	3.35	4.89	.16	1.30	3.43	.91	.30	2.22
	216	7.87	2.87	5.00	.16	1.30	3.54	.91	.30	2.33
	All	7.83	3.02	4.81	.16	1.30	3.35	.91	.30	2.14
May	150	6.71	2.13	4.58	.15	1.30	3.13	.91	.30	1.92
	176	7.61	2.71	4.90	.16	1.30	3.44	.91	.30	2.23
	200	8.17	2.59	5.58	.17	1.30	4.11	.91	.30	2.90
	216	6.67	1.00	5.67	.17	1.30	4.20	.91	.30	2.99
	All	7.29	2.11	5.18	.16	1.30	3.72	.91	.30	2.51
June	150	7.35	3.70	3.65	.13	1.30	2.22	.91	.30	1.01
	176	7.44	2.88	4.56	.15	1.30	3.11	.91	.30	1.90
	200	7.67	2.97	4.70	.15	1.30	3.25	.91	.30	2.04
	216	7.55	2.70	4.85	.16	1.30	3.39	.91	.30	2.18
	All	7.50	3.06	4.44	.15	1.30	2.99	.91	.30	1.78